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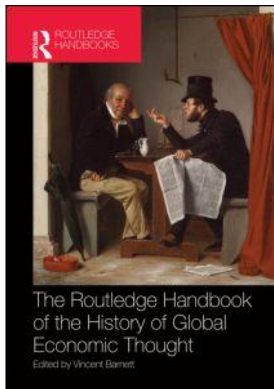

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Part II

The Americas

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11

United States of America

J.E. King

In 2013 there were almost 317 million people living in the United States, or slightly less than 5 per cent of the world's population. In 1700, more than two centuries after Columbus's voyage of discovery, the population of the continental United States was approximately 1 million, or 0.17 per cent of the world total. By 1914 it had risen to almost 100 million (already 5.5 per cent of the world total), as a result of both a high rate of natural increase and mass immigration – over 20 million in the century beginning in 1820. Some of this was involuntary, although the 399,000 slaves imported from Africa were much less important than natural increase in the slave population (which had reached 4.5 million by 1860) and were dwarfed by the almost 9 million slaves transported to the rest of the Americas. The total US population continued to grow at least twice as fast as that of Western Europe, with a further net migration of more than 31 million between 1913 and 1998 (see Maddison, 2006 for details). At the start of the new millennium, 10.4 per cent of the population was foreign-born, up from a low of 4.8 per cent in 1970 but still well below the peak of 14.7 per cent in 1910. Three in every four Americans now lived in urban areas (Hughes and Cain, 2011, 358).

Rapid population growth was accompanied by even faster expansion in output, which grew at annual rates of almost 4 per cent in the periods 1820–1913 and 1950–73, and almost 3 per cent in both 1913–50 and 1973–98. In consequence the United States' share of world GDP rose from a miniscule 0.1 per cent in 1700 to a peak of 27.3 per cent in 1950; in 2001 it still accounted for 21.4 per cent of world output. In terms of GDP per capita, the US had moved from fifth place in 1820, when it lagged behind Belgium, the Netherlands, the UK and Switzerland and was barely ahead of the Western European average, to lead the world in 1950, with output per head more than double that of Western Europe. By 1998 the gap had closed a little, but the US still had a 35 per cent advantage over the second richest nation (Japan) and a slightly more than 50 per cent lead over Western Europe (again see Maddison, 2006).

This remarkable growth in output was not entirely smooth or continuous, being interrupted by cyclical downturns of variable length and severity (the most dramatic being the Great Depression of the 1930s), and the benefits were very unevenly distributed between rich and poor. It was made possible by the profound structural changes that transformed a predominantly agricultural economy into the world's greatest industrial power (responsible for half the world's manufacturing output in 1945) and then into its most advanced post-industrial

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nation. The primary sector (agriculture, forestry and fishing) still employed 37.5 per cent of the working population in 1910; by 1950 this had fallen to 11.9 per cent, and by 2007 to a mere 0.7 per cent. The share of secondary employment (manufacturing, construction and transport) peaked at 41.0 per cent in 1950 and more than halved over the next half century, falling to 22.6 per cent in 2007 (Hughes and Cain, 2011, 567). By this time the tertiary (service) sector accounted for 76.8 per cent of total employment, and the largest US enterprises (in terms of stock market valuation) were no longer steel companies or car manufacturers but Information Technology corporations like Microsoft and Google.

There were equally profound social changes. In 1500 the Native American inhabitants were predominantly nomadic hunter-gatherers, although there was a significant settled agricultural population in some areas. By 1861 the native inhabitants had been almost completely displaced by European settlers, who were themselves divided between three quite distinct (though closely connected) modes of production: capitalism, simple commodity production (mainly by independent farmers) and slavery. In contrast with Europe, there was of course no landowning feudal aristocracy. In the next half century, with slavery abolished in 1865 at the end of the Civil War and the frontier now closed, the US had become an overwhelmingly capitalist country, in which the great majority of the population were legally free but had no alternative means of subsistence other than the sale of their labour power in waged employment. From about 1890 there was a rapid expansion of large corporations with substantial market power, initiating what is sometimes described as the 'monopoly stage' of US capitalism, which on some accounts has persisted until the present day.

The very distinctive economic and social development of the US is reflected in the prevailing ideology, which combined 'the idea – derived from initial Puritan settlement – of a nation enjoying divine favour, imbued with a sacred calling; and the belief – derived from the War of Independence – that a republic endowed with a constitution of liberty for all times had arisen in the New World'. The result was 'a *complexio oppositorum* of exceptionalism and universalism. The United States was unique among nations, yet at the same time a lode-star for the world: an order at once historically unexampled and ultimately compelling example to all' (Anderson, 2013, 6).

This pervasive American exceptionalism has exercised an extremely important influence on the development of the social sciences, including economics (Ross, 1991). It has induced a long-standing and persistent hostility to all forms of socialism, and has also encouraged resistance to government intervention in the economy. For this reason the US is sometimes seen as the leading example of a 'Liberal Market Economy', in contrast to the 'Co-ordinated Market Economies' of Northern and North-Western Europe. Certainly the US has always had a significantly smaller government sector, as can be seen from the ratio of government expenditure to GDP, which in 1913 was 8.0 per cent, compared with a 12.0 per cent average in four European countries (France, Germany, Netherlands, UK). By 1999 it had risen to 30.1 per cent, but the four-country European average was now 45.9 per cent (Maddison, 2006, 135).

Economic thought in the long-term

The pre-Columbian inhabitants left no documentary records, but their thinking on economic matters has been reconstructed by anthropologists and is summarised by Cicarelli (2012). It included some remarkably modern themes, including the need to live modestly but purposively, in harmony with nature, and to be content with satisfactory rather than optimal outcomes. The new European population also took a strong interest in political economy in the pre-Civil War period, as can be seen from the 987 pages devoted to this period in the first two volumes of

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Joseph Dorfman's monumental history of economic ideas in the United States (Dorfman, 1965–9; see also Emmett and Madison 2006, which is an indispensable source of information on all US economists of any significance). Some of the early writers were natives, like Benjamin Franklin (1706–90). New ideas also came regularly with the immigrant ships from Europe. Friedrich List (1789–1846) arrived in 1825 and spent seven years in the United States before returning to Germany, where he advocated protection for the country's infant industries. The Ricardian Socialist John Francis Bray (1809–97) was born in Washington D.C. but lived in England from 1822 to 1842, writing his influential *Labour's Wrong's and Labour's Remedy* (1839) there. Bray settled in Michigan in the early 1840s and continued to promote the socialist cause until his death (King, 1988, ch. 4). But his ideas had little impact. The prevailing American exceptionalism required that an explicitly anti-socialist approach be taken to political economy, emphasising the freedom and equality of opportunity that working people enjoyed in the United States and the grounds for optimism about the future. Thus Henry Carey (1793–1879), who was deeply influenced by the British classical economists, nevertheless criticised David Ricardo harshly for his emphasis on the conflict of interest between landlords and other classes. Like List, Carey also repudiated the Smith-Ricardo case for free trade as inappropriate to late industrialisers like Germany and the United States.

None of these writers had much influence in Europe, though Carey did attract criticism from John Stuart Mill. Along with the relatively obscure George Opdyke (1805–80), Carey and Bray were the only American economists cited by Karl Marx in the three volumes of his *Theories of Surplus Value* (1862–3; first published 1905–10), which was easily the most comprehensive history of economic ideas to have been written at the time. The first US economist to attract significant international attention was the journalist Henry George (1839–97), who won enormous popular support for his attack in *Progress and Poverty* (1879) on the 'unearned increment' represented by the rent on unimproved land. George's adaptation of Ricardian rent theory (in a direction that its author never contemplated) struck a chord not only with Americans worried at the closing of the frontier but also with radicals in Britain, who had always been hostile to their country's hereditary landed aristocracy, and in Australia, where the 'squattocracy' had a morally even more dubious claim to the land. Despite his call for 'common ownership' of the land, which appealed to many socialists, George opposed nationalisation and argued instead for the replacement of all existing taxes by a 'single tax' on rent to capture the unearned increment for the community (King, 1988, ch.5).

George was self-taught in economics, and it is notable that for much of the nineteenth century, Americans who wanted postgraduate education had to go overseas for it, most frequently to Germany; in 1880 there were only three professors of economics in US universities. This contributed to the considerable influence of the German Historical School in the US and probably slowed the diffusion of the new 'marginalist' or 'neoclassical' economic theory associated with William Stanley Jevons, Alfred Marshall, Carl Menger and Léon Walras. There was, however, a massive expansion of American universities in subsequent decades. The number of students increased twenty-fold between 1870 and 1928, and by 1900 there were already 51 professors of economics and a well-developed system of graduate schools offering PhDs in the discipline (Fourcade, 2009).

The first American neoclassical theorist of any stature was John Bates Clark (1847–1938), who made a genuinely original contribution to marginalist theory. In *The Distribution of Wealth* (1899) he identified capital as a factor of production on a par with labour and land, whose contribution to production could in principle be measured. The marginal product of capital determined the return to its owners, he maintained, in the same way that the wage rate was set by the marginal product of labour, and rent was determined by the marginal product of land.

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Again there was a political dimension to this analysis, since Clark had repudiated his earlier socialist sympathies and used the new theory to provide an explicit defence of the ethical legitimacy of the interest and profit income that was derived from the ownership of capital.

Hostility to socialism was a constant theme in US social thought, in both the 'Gilded Age' (1865–95) and the 'Progressive Era' (1895–1920). Indeed, it became stronger after 1865, when the evident existence of a large and rapidly growing class of permanent wage labourers turned the relations between capital and labour into the central social problem. This was 'the crisis of American exceptionalism' (Ross, 1991, 172). These concerns intensified in the 1880s, with the emergence of radical trade unionism and a mass socialist movement. When the American Economic Association was established in 1885, its platform drew on the German Historical School in calling for urgent social reform and greatly increased state intervention in economic life. However, this platform was soon watered down, under pressure from pro-capitalist interests.

Repression of socialist ideas in the academy was a recurring phenomenon (Lee, 2009, ch. 2), extending even to moderate social reformers like Richard T. Ely (1854–1943) and John R. Commons (1862–1945). It damaged the career of Thorstein Veblen (1857–1929), the author of *The Theory of the Leisure Class* (1899) and *The Theory of Business Enterprise* (1904), though in his case there was also an element of punishment for his extra-marital affairs. In his economic writings Veblen drew a sharp distinction between 'workmanship' and 'predation', the former associated with the technicians and engineers who contributed to efficient production and the latter benefiting the unproductive financiers and absentee owners who profited from it. But he was also highly critical of Marxian socialism, believing that emulation of one's social superiors was a stronger source of motivation than class solidarity. Veblen was equally hostile to neoclassical economics – a term that he invented – and argued that rational calculation was less important than habit and custom in motivating economic behaviour, and that economics should base itself on evolutionary biology, rather than on mechanics. Veblen is the only American economist of this era who continues to attract strong critical interest today; a new book devoted to his ideas has appeared almost every year in the twenty-first century.

By 1920 a distinct Institutionalist School of Economics had emerged, drawing on Veblen but also emphasising the priority of empirical research – above all, the collection of data – over abstract theoretical work. Its strongholds were Johns Hopkins, Wisconsin and Columbia Universities, with Harvard and Chicago dominated by neoclassical ideas (Morgan and Rutherford, 1998; Yonay, 1998).

Commons was the dominant force at Wisconsin, where he influenced the state's progressive social legislation and wrote the important text, *Legal Foundations of Capitalism* (1924), stressing the importance for economic theory of collective action by the state and also by a range of voluntary associations, including corporations and trade unions.

This emphasis on collective rather than individual behaviour served to distinguish the Institutionalists from the neoclassical economists. But the boundaries between the two schools were not at all clear-cut, either politically or methodologically. Thus Wesley Mitchell (1874–1948), author of a major book on *Business Cycles* (1913), expressed his support for capitalism in almost Panglossian terms, while John Maurice Clark (1884–1963), the son of John Bates Clark, attempted to reconcile the neoclassical and Institutional approaches. With the exception of Irving Fisher (1867–1947), who made important contributions to mathematical economics and to the theories of capital, value and money, the American neoclassical theorists were relatively undistinguished, in the 1920s and beyond.

The evident pluralism of economics during the 'Roaring Twenties' did not extend to toleration of Marxian political economy, which remained underdeveloped in the United States and was

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entirely absent from the academy. In fact the most prescient critics of unregulated capitalism were amateur economists: the professor of English William Trufant Foster (1879–1950) and the banker Waddill Catchings (1879–1967), who in their best-selling book *Profits* (1925) pointed to the danger of a crisis of underconsumption, since consumer expenditure tended to lag behind the growth of production. But Foster and Catchings failed to convince the academic economists, and right down to the Wall Street crash in 1929 all neoclassicals and many Institutionalists retained their faith in the market.

The Great Depression shattered this faith. It hit the US economy especially hard: between 1929 and 1933 output fell by 30 per cent, more than anywhere else in the developed world except Canada, and significantly more than in Germany, where the economic collapse brought Adolf Hitler to power. The percentage of Americans who were unemployed peaked in the high or low twenties, depending on whether the large numbers working on temporary government relief projects are counted as being in genuine employment. No prominent economist, neoclassical or Institutionalist, had predicted the collapse. The business cycle seemed to have been abolished, and steady growth with very low inflation appeared to be a permanent achievement of what was rapidly becoming the world's greatest economy. There are striking parallels between the 'Roaring Twenties' and the so-called 'Great Moderation' of 1992–2007. Irving Fisher was the most prominent, but by no means the only, academic economist to lose everything in the Wall Street crash.

Fisher redeemed himself, intellectually if not financially, by setting out a 'debt-deflation' explanation of the Depression in his *Booms and Depressions* (1932). When the price level falls sharply, Fisher argued, as it did in the Great Depression, the real value of debt increases, forcing many debtors into bankruptcy and compelling many others to reduce expenditure in order to meet their financial commitments. There was a fundamental asymmetry between debtors and creditors: the former could be forced to reduce their spending, while the latter were under no compulsion to increase theirs. Thus a falling price level was a major part of the problem, not part of the solution to a cyclical downturn.

These lessons were learned for a while – they were repeated (without acknowledgement) in chapter 19 of John Maynard Keynes's *General Theory* – only to be forgotten in the inflationary decades after 1945, when American economists began once more to maintain that debt was irrelevant and falling prices and money wages would be sufficient to eliminate unemployment of labour and capital. In the 1930s, however, Fisher's arguments had some influence on Franklin Delano Roosevelt's New Deal, which included provisions (later struck down as unconstitutional) legalising price-fixing agreements and encouraging the growth of trade unions and the determination of wages through collective bargaining.

Roosevelt's macroeconomic policies, however, were unstable and inconsistent, reflecting the confusion that prevailed among economists over the causes of the Depression and the potential remedies. The New Deal was, in fact, a series of improvisations, concocted by advisers who were sometimes sympathetic to Keynes, like Harry Dexter White and Marriner Eccles, and sometimes hostile. Among the latter was Henry Morgenthau, who was responsible for the disastrous attempt to restore 'sound finance' in the austerity budget of 1937 that triggered a brief but extremely sharp fall in output and employment in 1937–8. The Second World War, however, served as 'an incomparable laboratory demonstrating that deficits do cause prosperity' (Lekachman, 1969, 121). Keynes's own *How to Pay for the War* (1940) proved that the *General Theory* was not merely the economics of depression but was equally relevant to a situation of excess aggregate demand, when inflation had become the crucial policy issue.

By the early 1940s the influence of Keynes was beginning to grow, with the new ideas being accepted rapidly by a younger generation of American economists (Colander and Landreth,

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1996). A particularly important older convert was Alvin Hansen (1887–1975), whose *Fiscal Policy and Business Cycles* (1941) provided a teaching version of the *General Theory* with detailed statistical applications for the US economy. The statistical appendix was supplied by the young Paul Samuelson (1915–2009), who had already published a mathematical model of the business cycle in the same vein, synthesising the accelerator principle and the Keynesian multiplier and whose *Foundations of Economic Analysis* (1948) was a landmark in the development of mathematical economics in the United States. After the war the new ideas found their way into the introductory textbooks, though not without resistance from conservative politicians and businessmen who regarded government demand management as dangerously close to socialism. Samuelson was again an important influence, his *Economics* (1948) making Keynes both accessible and respectable for first-year undergraduate readers; it is still in print, the eighteenth edition appearing in 2010.

Unsurprisingly, the influence of Marxist ideas also increased substantially in the wake of the Depression, and the first genuinely original and distinctively American work on Marxian political economy was produced by Paul Sweezy (1910–2004), whose *Theory of Capitalist Development* (1942) contains one of the best summaries of Marx's economic thought ever written, together with a comprehensive account of developments in European Marxism in the sixty years since Marx's death. In the final part of the book Sweezy set out his own ideas, which were often described (though not by him) as 'Left Keynesian'. In the monopoly stage of US capitalism, and above all in the Roaring Twenties, corporate profit margins had widened, real wages had lagged behind productivity, and there was a chronic tendency for consumption to grow too slowly relative to output. This explained the severity of the Great Depression, and it made any sustained recovery unlikely. In essence Sweezy (like Hansen, but for very different reasons) was a stagnationist.

The Great Depression and the New Deal were only two of the forces that transformed American economics after 1933. Equally important were the flood of refugees from Hitler's Germany, the huge expansion of the military in the Second World War, and the rapidly increasing use of mathematical models and advanced statistical techniques. These developments were closely related. First, there were the European immigrants. Two of the most notable figures arrived before the establishment of the Nazi regime. Joseph Schumpeter (1883–1950), author of *Business Cycles* (1939, two volumes) and the posthumously published *History of Economic Analysis* (1954), spent the last two decades of his life at Harvard. The Hungarian-born polymath John von Neumann (1902–57), who was based at Princeton but worked extensively for the US government, made important contributions to mathematics and computing as well as to economics. Von Neumann's *Theory of Games and Economic Behaviour* (1944), co-authored with another émigré, Oskar Morgenstern (1902–77), was not fully appreciated for some years but eventually established game theory at the very heart of microeconomic analysis.

Between 1933 and 1941 a steady stream of Europeans arrived in the US. The authoritative two-volume study edited by Harald Hagemann and Claus-Dieter Krohn (sadly not translated into English) has entries on over 300 German-speaking refugee economists, many of whom ended up in the United States. Many of them left a mark on the development of American economics, including the development economists Albert Hirschman (1915–2007), Bert Hoselitz (1913–95) and Paul Rosenstein-Rodan (1902–85); the public finance theorists Gerhard Colm (1897–1968) and Richard Musgrave (1910–2007); the trade theorists Gottfried Haberler (1900–95) and Wolfgang Stolper (1912–2002); and the economic historian Alexander Gerschenkron (1904–78). Outside the mainstream, there were the Austrian subjectivists Fritz Machlup (1902–83) and Ludwig von Mises (1881–1973) and a number of Marxists, including Paul Baran (1910–64) and Adolph Lowe (1893–1995).

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Probably the most important of all the Europeans, however, were the mathematical theorists and econometricians Jacob Marschak (1898–1977), Gerhard Tintner (1907–83), Tjalling Koopmans (1910–85) and Abraham Wald (1902–50). As Director of the Cowles Commission, which was based first at Chicago and then at Yale, Marschak was especially important in developing the foundations of econometrics and in encouraging the formalisation of economic theory. His team at Cowles included the future Nobel laureates Kenneth Arrow (b. 1921), Trygve Haavelmo (1911–99) and Lawrence Klein (1920–2013). These radical changes in the nature of American economics were profoundly affected by the Second World War and the Cold War that soon followed it. The new techniques of linear programming, activity analysis and decision theory were extremely useful to the US military, and the work of the economists who developed them was often financed by the federal government and its agencies (Mirowski, 2002).

All this foreshadowed the future of American economics. The reality at the end of the war was still very different, as can be seen from the contents of a typical issue of the *American Economic Review* (*AER*), then (as now) the country's leading academic journal. The September 1944 *AER* was a relatively slim volume. Just over 100 of its 250 pages were taken up by six main papers. The lead article was devoted to a pressing policy issue, the disposal of surplus war property. Then there was an analysis of the national output at full employment in 1950, which involved the use of descriptive statistics and informal projections, and an empirical and descriptive article on the future economic prospects of Palestine. The remaining two papers were contributed by Leon Trotsky's former secretary, the Russian émigrée Raya Dunayevskaya (1910–87). One was her translation of a 30-page article on the teaching of economics in the Soviet Union, from the Russian-language journal *Under the Banner of Marxism*, and the other was her own analysis of this 'new revision of Marxian economics'. The editors promised further discussion of the Soviet article in the December issue.

None of these six main articles was concerned with neoclassical economics, and none contained a single equation or diagram. The same was true of three of the four brief 'communications', which dealt with the official British White Paper on full employment and the work of the US Labor Board. Ironically, the only theoretical piece in the entire issue was contributed by Kenneth Boulding (1910–93), whose later career revealed that his sympathies lay with evolutionary and Institutional rather than neoclassical economics. Boulding's brief note on the incidence of profits taxation did include two elaborate diagrams, but there were no equations. It was followed by no less than 80 pages of book reviews, and the issue concluded with 48 pages of lists, covering new books, the contents of new periodicals, and recent doctoral dissertations in economics. This final list demonstrates just how different the US PhD programme was in 1944; extended, book-length dissertations had yet to succumb to the twenty-first-century formula of compulsory coursework plus three (possibly unrelated) short articles.

This is, of course, not the only contrast. The December 2013 issue of the *AER* was the latest available to me as I completed the first draft of this chapter. It ran to a massive 470 pages, but there were no book reviews or lists of journal articles, which had long been relegated to the *Journal of Economic Literature*, established by the AEA in 1969 to release space in the *Review* for more articles. Books were in any case much less important than they had been in 1944, and were often ignored altogether by the increasingly influential citation indices. The entire issue of the *AER* consisted of 12 main articles, averaging more than 30 pages in length, and five shorter pieces. All were entirely mainstream in content and presentation, all included formal modelling, usually with many equations, and the empirical articles all used elaborate econometric techniques.

In 1944 the use of the term 'mainstream' would have been premature and anachronistic. Twenty years later, however, it would have been an entirely accurate description of the economics

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that was taught in all the major US universities and formed the basis of publications in all the leading journals. By the early 1960s, the core of mainstream microeconomics in the United States was provided by the Arrow-Debreu formalisation of Walrasian general equilibrium theory, set out in a series of journal articles and in Debreu's *Theory of Value: An Axiomatic Analysis of Economic Equilibrium* (1959). Gérard Debreu (1921–2000) was born and educated in Paris, where he was strongly influenced by the Bourbakist movement, a group of French mathematicians who attempted to reformulate mathematics on strictly axiomatic foundations (Weintraub, 2002). He came to the United States on a Rockefeller Scholarship in 1948 and made a permanent move in 1950, working first at Cowles and then at Berkeley; Arrow was nearby, at Stanford.

This was high theory, produced on the American seaboard, in California and also on the East Coast, at Harvard and MIT; it was sometimes described as 'saltwater economics'. The 'freshwater economics' taught at the University of Chicago was less abstract and more overtly political. Here Milton Friedman (1912–2006), George Stigler (1911–91) and their colleagues made the case for corporate capitalism, arguing that even the most concentrated product markets behaved in practice as if they were perfectly competitive, and denying the need for government regulation. Their free market liberalism was reinforced by the British-born Ronald Coase (1910–2013), who demonstrated that, on certain (somewhat implausible) assumptions, external costs and benefits could be internalised in voluntary contracts between the affected parties, eliminating the need for either regulation, or Pigovian taxes and subsidies. The Coase Theorem subsequently became a key element in neo-liberal economics.

Friedrich Hayek (1899–1992), who arrived at the University of Chicago in 1950, played a significant role in establishing the Mont Pèlerin Society, which was based in Switzerland and, beginning in 1947, brought together American and European neo-liberals to promote the cause of the free market (Van Horn and Mirowski, 2009). Hayek's own interests were already moving away from economics to political philosophy and psychology, and he was never really a core member of the Chicago school. By 1970, however, there was a distinct Austrian school of economics in the United States, in which Israel Kirzner (b. 1930) and Murray Rothbard (1937–96) were prominent. These American Austrians were firmly subjectivist in orientation, stressing the role of entrepreneurship, the importance of competitive market processes, the irrelevance of equilibrium outcomes and the futility of macroeconomic modelling. Although they were strong supporters of unregulated markets, their hostility to mathematical formalism and econometric research rendered them very uncertain allies of the neoclassical mainstream in microeconomics.

In macroeconomics, a neoclassical-Keynesian synthesis came to dominate teaching, research and eventually (in the Kennedy-Johnson administrations of the 1960s) US government policy. It had three components. The first was the IS-LM model that established the equilibrium levels of real income and the rate of interest, with output potentially constrained by effective demand rather than by supply conditions, requiring active fiscal and/or monetary policy to guarantee full employment. This, however, applied only to the short period. The second component of what came to be known as the Old Neoclassical Synthesis was the neoclassical growth model published in 1956 by Robert Solow (b. 1924), which assumed full employment of both labour and capital. Finally, the inflation rate was determined in the labour market by reference to the Phillips Curve, which related the rate of money wage inflation to the unemployment rate. Like IS-LM, first devised by the English theorists J.R. Hicks and James Meade, this was another analytical import from the United Kingdom (the New Zealander A.W. Phillips was based at the London School of Economics).

In this theoretical framework, changes in the stock of money affected the rate of interest but not (directly) the inflation rate. This drew strong criticism from 'monetarists' like Milton

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Friedman, who insisted on the continuing relevance of the Quantity Theory, as formalised by Irving Fisher; on the importance of inflationary expectations; and on the need for the Federal Reserve to apply a strict zero-inflation rule limiting the rate of growth of the money stock to the expected rate of growth of real output. In *A Monetary History of the United States, 1867–1960* (1963), Friedman and Anna J. Schwartz explained the severity of the Great Depression in monetarist (and clearly anti-Keynesian) terms, as the result of the Fed's inaction in the face of the bank failures of the early 1930s, which had led to a sharp and damaging contraction in the money supply. Until the acceleration of inflation in the late 1960s, however, monetarism remained a minority position, and as late as 1971 the Republican President Richard Nixon declared himself to be a Keynesian.

Very different objections to the Old Neoclassical Synthesis came from Sidney Weintraub (1914–83), his former student Paul Davidson (b. 1930) and Hyman Minsky (1919–96), who complained that the new orthodoxy was inadequate in its treatment of money and finance and also neglected the cost-push (and especially the wage-push) dimension of inflation. From *Money and the Real World* (1972) through to his *Post Keynesian Macroeconomic Theory, Second Edition* (2011), Davidson consistently stressed the role of fundamental uncertainty in Keynes's own thought, and the need to reject the three fundamental axioms that the neoclassical Keynesians took for granted: the neutrality of money, its gross substitutability for all other commodities, and the ergodic (that is, predictable) nature of economic phenomena. Minsky's *John Maynard Keynes* (1975) set out a rather different, original and idiosyncratic version of Keynesian macroeconomics, focussing on the financial fragility created by the relaxation of lending standards in the upswing phase of the business cycle and the need for vigilant regulation of the financial system to prevent a repetition of the Great Depression. By the late 1970s these ideas formed the theoretical core of a new 'Post Keynesian' school.

There was also some life elsewhere outside the mainstream. The emergence of an American school of Austrian economics has already been mentioned. One or two of the surviving Institutionalists were also prominent. Clarence Ayres (1891–1972) taught at the University of Texas for almost forty years. Drawing heavily on Veblen, Ayres distinguished 'technological' and 'ceremonial' forms of behaviour and stressed the interplay of institutions and technology, which he contrasted with the neoclassical emphasis on individual wants and scarcity. At least one Institutionalist exercised real influence over public policy in the postwar era. This was Arthur F. Burns (1904–87), who was President of the AEA in 1959 and served both the Eisenhower and Nixon administrations, first as Chair of the Council of Economic Advisers (1953–6) and then as Chair of the Board of the Federal Reserve (1970–8). Burns is a salutary reminder that the Institutionalist/neoclassical divide was not also unambiguously a division between left and right, for he was a Republican and an associate of the strongly pro-market American Enterprise Institute. Compare his political persuasions with those of the neoclassical stalwart Paul Samuelson, who was a liberal Democrat and served the Kennedy and Johnson administrations.

Also on the left was John Kenneth Galbraith (1908–2006), who combined Institutionalist and Keynesian themes in a series of influential books, including *American Capitalism: the Concept of Countervailing Power* (1952), the best-selling *The Affluent Society* (1958) and *The New Industrial State* (1967). He argued that the highly unionised, big-government, corporate capitalism of the post-1945 period was fundamentally different from the nineteenth-century owner-managed, competitive, liberal capitalist market system on which neoclassical economic theory was based, and therefore required a very different type of economic analysis. Galbraith drew on the ideas of many earlier thinkers, including Veblen, the technocrats of the 1920s and Adolph Berle's and Gardiner Means's Institutionalist classic, *The Modern Corporation and Private Property* (1932).

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He may also have been influenced by the ex-Trotskyist James Burnham's *The Managerial Revolution* (1941), which maintained that Nazi Germany, Stalin's Russia and corporate America were converging to a post-capitalist managerial dystopia. In his *Capitalism, Socialism and Democracy* (1943), Galbraith's Harvard colleague Joseph Schumpeter had taken a rather similar line. Although Galbraith was a brilliant writer and was respected sufficiently by the profession to be elected President of the AEA in 1970, his ideas were by this time a very long way outside the mainstream of US economics.

There was also a small (and declining) Marxist residue, which was subject to severe repression in the heyday of McCarthyism (Lee 2009). In the 1950s Paul Baran was the only tenured Marxist professor of economics in the United States (King, 1988, ch. 8). In 1958 Baran published *The Political Economy of Growth*, a powerful attack on US imperialism that attributed the continuing poverty and slow growth of the underdeveloped global South to exploitation by the rich capitalist countries of the North. The poor countries did produce an economic surplus, Baran argued, but much of it was extracted in the form of super-profits and most of the rest was squandered on luxury consumption by parasitical ruling classes subservient to overseas capital. He was already working with Paul Sweezy on *Monopoly Capital* (1964), which applied the concept of the economic surplus to the United States, in an ambitious application of Marx's analysis of productive and unproductive labour. Baran and Sweezy set out a 'law of the rising surplus', according to which a steadily increasing proportion of economic activity was wasteful, or surplus-absorbing. This included expenditure on advertising and product differentiation, much civilian government spending, and the ever-increasing military budget.

None of these heterodox groupings had any significant influence on teaching or research in Ivy League universities or on the activities of the major research foundations. But this began to change in the late 1960s, with the re-emergence of political radicalism, especially among students (where a crucial role was played by opposition to the Vietnam War), industrial workers (with a wave of strikes, and an increasingly serious problem of 'wage-push' inflation), and women (with the emergence of a 'second wave' of feminism). There was a rediscovery of Marx, again with a distinctively American flavour; the beginnings of a consciously feminist economics; the revival of Institutionalist ideas; and the emergence of a self-proclaimed Post Keynesian macroeconomics that rejected the neoclassical synthesis. New organisations were established: the Association for Evolutionary Economics in 1965 and the Union for Radical Political Economics in 1968. New journals began to appear: the *Journal of Economic Issues* in 1967, the *Review of Radical Political Economics* in 1969, the *Journal of Post Keynesian Economics* in 1977 and (surprisingly delayed) *Feminist Economics* in 1995.

Neoclassical economics was now being criticised for its excessive abstraction and formalism, for its neglect of the social, psychological, political and gender dimensions of economic behaviour, and (not least) for its political apologetics. Serious logical defects in the Clarkian theory of capital had been identified by the Cambridge (UK) economists Piero Sraffa and Joan Robinson, which undermined both the marginal productivity theory of distribution and the neoclassical growth model. Samuelson, Solow and other theorists based in Cambridge (MA) attempted unsuccessfully to rescue neoclassical analysis, before Samuelson conceded defeat in 1966 (Harcourt, 1972). When John Kenneth Galbraith was elected president of the American Economic Association for 1971, and invited Robinson to give the keynote Richard T. Ely lecture at the AEA's annual meeting at the end of that year, opponents of the mainstream had some reason to believe that they were in with a chance of supplanting it, or at least of bringing about substantial change.

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Intermezzo: the Americanisation of economics

The third quarter of the twentieth century saw the rapid and comprehensive 'internationalization' of economics (Coats, 1996). Actually this term is a polite euphemism for Americanisation. The increasing dominance of the United States can be seen in every aspect of the discipline, from the pinnacle of research achievement to the structure, content and graphic design of first-year undergraduate textbooks. Thus 63 of the 74 Nobel Prizes in economics awarded between 1969 and 2013 went to Americans, either native-born or long-term permanent residents; between 1980 and 2013, it was 49 out of 56 (http://nobelprize.org/nobel-prizes/economics).

A substantial number of the very best economists from all over the world came to work at the best American universities, only now as free agents, not as refugees. Publication in US journals (and therefore in English) was increasingly seen by overseas scholars as essential in order to establish their professional standing and influence public policy. By 1989, 20 of the top 27 economics journals were published in the United States (Lee, 2009, 45). It might be objected that this is not an unbiased statistic, since its compiler, Art Diamond, was himself an American, but this is precisely the point: no such list compiled by someone outside the United States would have carried such (global) authority.

Additional influence was exercised through the graduate schools, which increasingly attracted the brightest and best of the world's students; by 2000, 54 per cent of those enrolled in US PhD programmes in economics came from overseas (Fourcade, 2006, 173). American dominance was evident in almost every element of postgraduate education, from the now-universal requirement of a PhD as a pre-condition of academic employment to the introduction of a substantial coursework element in the degree (neither being generally found even in Anglophone countries such as Australia or the United Kingdom until late in the twentieth century). Last, but not least, was the Americanisation of undergraduate education in economics, with Samuelson's *Economics* and its many imitators making massive inroads into the national textbook markets of almost every country on the planet and encouraging lecturers, tutors, course designers and university managers to adopt the American approach to the teaching of economics.

To a considerable extent, the Americanisation of economics was a rather straightforward consequence of the hegemonic position of the United States at the end of the Second World War; it was one important dimension of the nation's overwhelming 'soft power'. This was not confined to popular culture, though jazz and the Hollywood cinema were important elements in it. The economic strength of the United States at the end of the Second World War was simply overwhelming; the economy had doubled between 1938 and 1945, now accounting for half the world's industrial output and three-quarters of its gold reserves. Its intellectual dominance had been strengthened by the influx of European refugee economists after 1933, which contributed (as we have seen) to the triumph of neoclassical formalism over what now appeared to be an outdated and parochial tradition of American Institutionalism.

Globalisation also played a part. The cost of transport and communications fell steeply and continuously after 1945, making the movement of people and ideas much easier, and this, too, disproportionately benefited the global hegemon. English became the global language, in academic life no less than in finance, trade and industry. Thus when the European Society for the History of Economic Thought was set up in 1996 it adopted English as its *lingua franca* from the start, while the *European Journal of the History of Economic Thought*, with editors drawn from Austria, France, Ireland and Portugal, rarely publishes papers or book reviews in any other language.

But the Americanisation of economics was also the result of deliberate action by private and public sector organisations. This included the provision of fellowships and scholarships, by the Rockefeller and Ford Foundations and by federal government agencies, to enable the brightest

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and best of overseas economists to visit the United States. It was also significant that the two crucial Bretton Woods institutions, the International Monetary Fund and the World Bank, had their headquarters in Washington, where they had close links with the US Treasury and its Wall Street connections. It was thus no accident that the neo-liberal policy prescriptions imposed on many developing countries in the 1980s and 1990s came to be known as the 'Washington Consensus'. Often they were implemented by local officials with Ivy League PhDs in economics, who had apparently studied American economic life more closely than the country's democratic political system: the 'Chicago Boys' in Pinochet's Chile, for example, and the 'Berkeley Mafia' in Suharto's Indonesia.

Late in the century, US military and political power seemed to be in irreversible decline, as argued by the historian Paul Kennedy in his influential *The Rise and Fall of the Great Powers* (1988). But the nation's cultural and ideological hegemony remained largely intact, and it could indeed be seen as increasing, with the growing acceptance of neo-liberal ideas around the world, not least (after 1991) in the former Communist countries of Eastern Europe. In Western Europe, the former Co-ordinated Market Economies were increasingly coming to resemble the Anglo-Saxon Liberal Market Economies, with the increasing power of finance enforcing 'shareholder value' – short-run profit maximisation – as the only sustainable objective of the large corporation. In some ways, then, the 'soft power' of the United States was still growing. Certainly there was no evidence that the Americanisation of economics was under serious threat.

US economics in the age of neo-liberalism

The neo-liberal age dawned with the election of Margaret Thatcher in Britain in 1979 and Ronald Reagan as US President in the following year. It took another decade for the high inflation of the 1970s to be brought under control, ushering in a period of faster growth, somewhat lower unemployment and very much lower inflation that came to be known as the 'Great Moderation' of 1992–2007. Until the onset of the Global Financial Crisis – otherwise known as the 'Great Recession' of 2007–? (Mirowski, 2013) – it was possible to believe that improvements in macroeconomic management had made a return to the crisis years of 1973–92 impossible. A similar illusion had prevailed in the 1920s, as we have seen.

In microeconomics, the rise of Walrasian equilibrium modelling had culminated in the canonical *General Competitive Analysis* (1971) by Arrow and the Cambridge (UK) theorist Frank Hahn. Very soon, however, the entire general equilibrium project was undermined by the demonstration, by Debreu and two colleagues, the American Hugo Sonnenschein (b. 1940) and the Yale-trained Argentinian Rolf Mantel (1935–99), that almost nothing could be said *a priori* about the excess demand functions that were generated by such models, and therefore there was no reason to expect the existence of a unique equilibrium. The Debreu-Mantel-Sonnenschein theorem, sometimes described as the 'anything goes theorem', was so influential that by the end of the 1980s general equilibrium models had been quietly abandoned by the great majority of US microeconomists, just as (ironically) they were being incorporated into the core of macroeconomic theory. General equilibrium was rapidly replaced by game theory as the principal theoretical framework for the analysis of microeconomic problems. It shared the most important characteristics of Walrasian modelling, above all the assumptions of methodological individualism, instrumental rationality and certainty-equivalence, so that goals and constraints were known, at least probabilistically, and the standard procedures of constrained maximisation could be applied.

The range of problems to which neoclassical microeconomics appeared to offer solutions was steadily expanding. Under the leadership of the Chicago theorist Gary Becker (1930–2014),

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economists now invaded what had previously been considered the domain of the other social sciences, which (it was claimed) were being driven out of the occupied terrain by the irresistible advance of the new 'economics imperialism'. Thus neoclassical economic modelling was applied to education (via the concept of 'human capital'), political behaviour (in 'public choice' theory), crime (since the criminal could be seen as a rational, utility-maximising entrepreneur) and the family (with the popular metaphor of the 'marriage market' being taken literally and feminists being enraged by the idealisation of male domestic tyranny). In this way, inter-disciplinary cooperation gave way to invasion tactics. But the imperialists were often fiercely resisted, and with considerable success; neoclassical models were indeed sometimes used in political science, sociology, anthropology and social psychology, but only on the disciplinary fringes.

Perhaps the most important new field for the employment of neoclassical modelling techniques was provided by financial theory, which proved to have extremely large and wide-ranging real-world applications. Without the Capital Asset Pricing Model developed by Fischer Black (1938–95), Harry Markowitz (b. 1927), Merton Miller (1923–2000), William Sharpe (b. 1934) and others, there would have been no explosive growth of the market for financial derivatives, and without the Efficient Market Hypothesis articulated by Eugene Fama (b. 1939) the New Deal regulatory structure would not have been dismantled in the 1980s and 1990s to permit the explosive and very largely unregulated growth of those markets. Thus mainstream microeconomics played an important part in constituting the new economic world of financialised neo-liberalism.

The political context was, as always, extremely important. The neo-liberal credo was that all social problems had a market solution, and where markets did not exist they had to be created. The Coase Theorem was interpreted (though not, perhaps, by its creator) as implying that government failure was always worse than market failure. Taken in conjunction with the notions of rent-seeking behaviour and regulatory capture, it allowed mainstream economics to be used to advocate light regulation, self-regulation and thoroughgoing deregulation of labour markets and utilities as well as the financial sector.

Economics imperialism now extended its reach from the academic journals into popular culture and ideology. Chicago was again at the centre of this movement, with the best-selling book by Milton Friedman and his wife, Rose Friedman (1910–2009), *Free to Choose* (1980), being used as the basis for an influential television series promoting neo-liberal ideas. This is the epoch when 'economics goes to the movies', and also to the television studios. Galbraith's 'Age of Uncertainty', televised in 1977, presented the history of economics from a broadly social democratic, Keynesian perspective, but it was much less influential than the Friedmans' programmes, which were made in reaction to it. It was not long before the first successful Hollywood film was made starring an economist. This was Ron Howard's *A Beautiful Mind* (2001), featuring the brilliant but deeply troubled game theorist John Nash (b. 1928), whose eponymous theorem was one of the most influential products of the post-von Neumann era in game theory. Nine years later, Charles Ferguson's *Inside Job* (2010) took a much less sympathetic look at the prominent macroeconomic theorists who had given a clean bill of health to the Icelandic banking system just before what, with hindsight, was its inevitable collapse. Back in 1872 Marx had already described those responsible as 'hired prize-fighters of the bourgeoisie'.

Macroeconomic theory had changed dramatically since the heyday of US Keynesianism. The stagflation of the 1970s had deeply undermined faith in the Old Neoclassical Synthesis, in macroeconometric modelling, and in the sort of fine-tuning of macroeconomic policy that this intellectual apparatus had been used to design and implement. There was a rapid shift in policy towards the adoption of a single target, output price inflation, and a single instrument, the stock of money and (when this failed) the rate of interest. The so-called Taylor rule, named after the

Stanford theorist John B. Taylor (b. 1946), required the Federal Reserve to increase the base interest rate whenever inflation rose above a two per cent target rate, or real GDP rose above its trend level, and to reduce it when the reverse was true. This was a *de facto* (though unacknowledged) acceptance of the Post Keynesian proposition that the money supply was endogenous, but without any recognition of the need to target employment (except indirectly, through the relation between actual and trend GDP), asset price inflation or the stability of the financial system. And there was no longer any scope for fiscal policy or incomes policy, let alone financial market regulation, as useful policy instruments.

These developments in macroeconomic policy were accompanied (and indeed largely caused) by a radical shift in macroeconomic theory, and in the methodological arguments used to justify this shift. Monetarism had always been rather light on theory, with the Quantity Theory defended mainly on empirical grounds: the velocity of circulation was roughly constant, Friedman claimed, and in the Equation of Exchange ($MV = PT$) causation ran principally (though not exclusively) from left to right, so that changes in the money stock (M) caused changes in the price level (P). Friedman also claimed, correctly, to have something in common with Keynes, since both men did their macroeconomics from the top down, not from the bottom up.

The second generation of Chicago monetarists, led by Robert Lucas (b. 1937), did it the other way round, insisting on the provision of 'microfoundations' for macroeconomic theory. If macroeconomic models were not based on the assumption of rational, utility-maximising behaviour by individuals, there could be no guarantee that these relationships would be stable over time, no reason to have confidence in econometric estimates of the relevant parameters, and hence no grounds on which to expect policies based upon such estimates to be successful. This was especially important for the analysis of inflation, since it led to the replacement of the old monetarist assumption of 'adaptive expectations' by the new assumption of 'rational expectations', first articulated in 1961 by John Muth (b. 1930) and vigorously advocated by Lucas and other self-proclaimed New Classical theorists like Thomas Sargent (b. 1943), Finn Kydland (b. 1943) and Edward Prescott (b. 1940).

As already noted, the macroeconomists of the neo-liberal era took up general equilibrium modelling just as it was being discarded by their colleagues in microeconomics. The new Dynamic Stochastic General Equilibrium (DSGE) models focussed on individual consumers of a very particular type: representative agents with rational expectations, who maximised lifetime utility in an economic environment that was characterised by random shocks. By the 1990s these RARE microfoundations were very widely accepted by mainstream macroeconomists, including many of those who described themselves as 'New Keynesians'. The New Classicals saw unemployment as voluntary in nature, since it resulted from the free decisions of rational individuals who had chosen leisure in preference to paid employment. The New Keynesians, like Paul Krugman (b. 1953) and Joseph Stiglitz (b. 1942), argued instead that labour and product markets were imperfect, so that prices and money wages tended to be sticky downwards. Involuntary unemployment was the most important consequence of the asymmetries in information that gave rise to imperfect markets. There were good reasons why profit-maximising employers might not offer work to unemployed people who were prepared to undercut their existing workforce.

These arguments constituted an important element of the New Neoclassical Synthesis that had emerged by the late 1990s. Post Keynesian critics like Davidson and Minsky always maintained that this was a travesty of Keynes, who had maintained in chapter 19 of the *General Theory* that downward flexibility in prices and wages should be discouraged. The great majority of New Classicals and New Keynesians, however, now agreed on the need for RARE microfoundations, accepted the Taylor Rule as the basis for macroeconomic policy, and at least implicitly rejected Keynes's irreducibly macroeconomic principle of effective demand.

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Thus the insights of Post Keynesians like Davidson and Minsky were marginalised, along with the contributions of other heterodox economists from the Institutionalist and radical-Marxist traditions. It became increasingly difficult for non-mainstream economists to publish in the leading journals, and their own students were less and less likely to find employment in the leading universities. Some formerly heterodox economics departments were besieged and overrun by the mainstream – Rutgers in the mid-1980s, Notre Dame 20 years later – leaving only a handful of institutions still offering heterodox PhD programmes. By 2014 only the New School in New York City, the University of Massachusetts at Amherst, the Levy Institute of Bard College at Annandale-on-Hudson in New York and the University of Kansas City-Missouri remained. Individuals could still find jobs in less prestigious state universities and in liberal arts colleges, but at the expense of heavy teaching loads and limited access (if any) to research funding (Lee, 2009, chs. 4–5). The 'second crisis of economic theory' that Joan Robinson had foreshadowed back in 1971 had not worked out as she had hoped.

By the beginning of the new century, however, some observers were pointing to an entirely new phase in the evolution of American economics, with emerging research paradigms that posed a real challenge to neoclassical theory. The former mainstream, they claimed, was now fragmenting. The new research programmes included evolutionary economics, behavioural economics, evolutionary game theory, behavioural game theory, experimental economics, neuroeconomics and agent-based complexity economics (Colander *et al.*, 2004). The last-named provides a good case study. Complexity economics is a branch of the science of complexity, centred on the Santa Fé Institute and largely financed by Citibank. Its fundamental conception is of an economic system dominated by evolutionary processes of change that are adaptive and self-organising and that generate non-linearities, path dependence, emergent properties that cannot be reduced to their component parts, and increasing returns to scale. Complexity economics only became possible with advances in information technology that allowed the numerical simulation of dynamic equation systems for which analytical solutions could be obtained.

These developments not only represented a new pluralism in American economics, it was argued, but also provided clear evidence of *reverse* imperialism, with economics importing new ideas, techniques and research agendas from biology, neuroscience and cognitive psychology. In the process, the new 'dissenters', or 'heterodox mainstreamers', were abandoning much of the intellectual apparatus of the old mainstream. They recognised that individuals are socially embedded, not atomistic; accepted that economic processes are evolutionary rather than mechanical; and acknowledged that individuals and socio-economic structures are mutually dependent, so that the quest for 'microfoundations' was bound to fail. Thus critics from the old heterodox schools were becoming increasingly irrelevant in their continuing attacks on what was now a straw man.

The heterodox economists, however, maintained that the new ideas were being absorbed into mainstream theory in ways that ensured that no threat was posed to its core tenets. A process of 'bastardization' was under way, similar to that which had accompanied the incorporation of Keynes's macroeconomics into the mainstream of American economics in the 1940s. This could be seen in all the new streams of thought, perhaps most clearly in the case of behavioural economics. Here the 'old behaviourism' of Herbert Simon (1916–2001) had been edged aside by the 'new behaviourism' of Daniel Kahneman (b. 1934) and Amos Tversky (1937–96), which was essentially individualistic and carried the comforting implication that in many cases economic agents needed only to be 'nudged' in the right direction for something approaching the instrumentally rational behaviour postulated by traditional neoclassical theory to be obtained.

Increasing concern is at last being shown over the growth of inequality in income and wealth that has occurred in the United States since the 1970s, and which has had a social and political no less than an economic impact. This has been recognised by mainstream economists like Stiglitz, in *The Price of Inequality* (2012), and Jeffrey Sachs, in *The Price of Civilization* (2011). But it has not been adequately explained by mainstream theory, since narratives that focus exclusively on the consequences of labour-saving technical change are not convincing. Changes in social and (especially) political power are a crucial part of the explanation for the growth in inequality, which suggests that there may well be some mileage left in the (old) Institutionalism and in radical and Marxian political economy. This conclusion is reinforced by the aftermath of the Global Financial Crisis, which only failed to repeat the catastrophe of the Great Depression because of the adoption of old-fashioned Keynesian stimulus measures, in the United States and elsewhere. Although there was a short-lived increase in interest in Post Keynesian and Marxian ideas after 2007, and the work of Hyman Minsky was often cited, there seems to have been little or no reduction in the influence of the core ideas of mainstream economic theory (Mirowski, 2013).

To conclude: the course of economics in the United States has been influenced by factors both internal and external to the discipline. Most important among the internal influences after 1945 was the strong commitment to formal modelling, which reinforced the tendency towards economics imperialism but also provoked criticism of the economists' inappropriate 'scientism' – mindless imitation of the methods of the natural sciences – and, even more pejoratively, of their 'physics envy'. The external influences included the pervasive American exceptionalism that had been a common element in all the social sciences from the earliest days and included a strong anti-socialist orientation that was strengthened after 1945 by the onset of the Cold War. For much of the twentieth century, academic economics in the United States had very close links to both business and the state, providing practical instruments and techniques for use by government, corporations and courts of law (Fourcade, 2009). It relied on four sets of patrons: universities, governments, business and foundations (Goodwin in Morgan and Rutherford, 1998). While the academy was never merely a creature of the other three patrons, it was never entirely independent of them, either. What the future holds for economics in the United States will of course be decided by its academic practitioners, but their decisions will be conditioned and constrained, as they always have been, by outside political and financial interests.

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